## APPENDIX I:

## THE LISTING OF CLAIMS:

- 1. (previously presented) A catalyst obtained from
  - a) a chromium compound CrX<sub>3</sub> and the at least equimolar amount, based on the chromium compound CrX<sub>3</sub>, of a ligand L or from an existing chromium complex CrX<sub>3</sub>L, in which the groups X are, independently of one another, abstractable counterions and L is a 1,3,5-triazacyclohexane of the formula I

where the groups  $R^1$  to  $R^9$  are, independently of one another: hydrogen or organosilicon or substituted or unsubstituted carboorganic groups having from 1 to 30 carbon atoms, where two geminal or vicinal radicals  $R^1$  to  $R^9$  may also be joined to form a five- or six-membered ring, and

- b) at least one activating additive selected from the group consisting of (i) and (ii) wherein:
  - i) is a combination of an unsubstituted or substituted five-membered aromatic N-heterocycle and at least one aluminum alkyl, wherein some of the alkyl groups of the aluminum alkyl are optionally replaced by halogen and/or alkoxy, and
  - ii) is an alkylalumoxane.
- 2. (previously presented) The catalyst defined in claim 1, wherein the groups  $R^1$ ,  $R^2$  and  $R^3$  in the 1,3,5-triazacyclohexane I are, independently of one another, substituted or unsubstituted  $C_1$ - $C_{12}$ -alkyl,  $C_6$ - $C_{15}$ -aryl or  $C_7$ - $C_8$ -arylalkyl.
- 3. (previously presented) The catalyst defined in claim 1, wherein the groups  $R^1$ ,  $R^2$  and  $R^3$  in the 1,3,5-triazacyclohexane I are, independently of one another, substituted or unsubstituted  $C_1$ - $C_{12}$ -alkyl or  $C_7$ - $C_8$ -arylalkyl.
- 4. (canceled)

- 5. (original) [(1,3,5-Tris(2-n-propylheptyl)-1,3,5-triazacyclohexane) CrCl<sub>3</sub>].
- 6. (original) [(1,3,5-Tris(2-ethylhexyl)-1,3,5-triazacyclohexane) CrCl<sub>3</sub>].
- 7. (previously presented) A process for preparing oligomers having up to 30 carbon atoms by reaction of an olefin or a mixture of olefins at from 0 to 150°C and pressures of from 1 to 200 bar in the presence of the catalyst defined in claim 1.
- 8. (previously presented) The catalyst defined in claim 1, wherein the groups  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$  in the 1,3,5-triazacyclohexane I are, independently of one another, hydrogen or methyl.
- 9. (new) A process as claimed in claim 7, wherein the olefin or mixture of olefins is selected from straight-chain and branched  $\alpha$ -olefins having from 2 to 4 carbon atoms.
- 10. (new) A process as claimed in claim 7, wherein the olefin or mixture of olefins is selected from 1-butene and 1-butene in mixture with its isomers.
- 11. (new) A process as claimed in claim 7, wherein the olefin or mixture of olefins is employed in form of a raffinate comprising 1-butene in mixture with its isomers.
- 12. (new) A process as claimed in claim 7, wherein the olefin is ethene.
- 13. (new) A process as claimed in claim 7, wherein the catalyst is obtained from
  - a) a chromium compound CrX3 and the at least equimolar amount, based on the chromium compound CrX3, of a ligand L or from an existing chromium complex CrX3L, in which the groups X are, independently of one another, abstractable counterions and L is a 1,3,5-triazacyclohexane of the formula I

where the groups  $R^1$  to  $R^9$  are, independently of one another: hydrogen or organosilicon or substituted or unsubstituted

carboorganic groups having from 1 to 30 carbon atoms, where two geminal or vicinal radicals  $R^1$  to  $R^9$  may also be joined to form a five- or six-membered ring, and

 $R^1$ ,  $R^2$  and  $R^3$  in part or in whole, and independently of one another, are a group which carries a substituent attached via a carbon atom, in the  $\beta$  position relative to the nitrogen atom of the 1,3,5-triazacyclohexane ring, and

- b) the alkylalumoxane.
- 14. (new) A process as claimed in claim 13, wherein the olefin is ethene.